UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,683	01/18/2001	Fabrice Walter	ICB-0038	6920

29116 7590 03/01/2005

ROBINSON & POST, L.L.P.
NORTH DALLAS BANK TOWER, SUITE 575
12900 PRESTON ROAD, LB-41
DALLAS, TX 75230

EXAMINER	
DADA, BEEMNET W	

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/764,683	WALTER ET AL.	
	Examiner	Art Unit	
	Beemnet W Dada	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-10,14 and 15* is/are allowed.

6)☒ Claim(s) *11-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in reply to an amendment filed on September 07, 2004. Claims 1, 7 and 8 have been amended and new claims 14 and 15 have been added. Claims 1-15 are pending.

Allowable Subject Matter

2. Claims 1-10 and 14-15 are allowed.

3. As per claims 1 and 7, The prior art on record does not teach in an integrated circuit, generating a random number by a generator and ciphering the random number using a stored cipher key to obtain a first password, which is placed in a password register, and comparing the first password with a second password, the second password being generated in accordance with a random number generated by a random number generator and if there is a match between the first and second passwords freeing a test path leading from a tester to parts of the integrated circuit having confidential nature by opening a barrier in the integrated circuit.

4. Claims 2-6, 8-10 and 14-15, are allowed because of dependency.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geronimi et al US Patent 5,629,513 in view of Yu et al US Patent 6,067,621.

7. As per claim 11, Geronimi et al discloses a tester for an integrated circuit containing hardware and/or software parts having a confidential nature (see for example, col 2 In 6062; a tester be present to run such testing of the integrated circuit) wherein the tester comprises: means of sending (routing) a calculated parameter to an integrated circuit (see for example; col 4 In 34-55). Geronimi does not explicitly teach a second password generated from a received random number. Yu discloses an authentication means comprising of storing a cipher key (see for example; col 6 In 15-16); ciphering this random number using a key stored in said tester via a ciphering algorithm to obtain a second password (see for example; col 7 In 40-67). Geronimi recognizes the need of authentication (see for example; col 4 In 56-col 5 In 4). Yu further discloses a means of authentications between a communications device (server) and an integrated circuit (see for example; IC card, abstract). Furthermore, authentication schemes are well known in the art to capable to be implemented by any means depending of which system is doing the authentication. One of ordinary skill in the art at the time of the applicant's invention would have recognized the case of the integrated circuit doing the authenticating in Geronimi and used the authentication communication means of Yu for authenticating a tester, wherein a random number is sent from the integrated circuit to the tester and passwords are received and compared by the integrated circuit. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Yu within Geronimi because

it would have increased access security through the use of one-time-passwords based on a random number (see for example; Yu col 2 In 1-13).

8. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geronimi et al US Patent 5,629,513 in view of Yu et al US Patent 6,067,621 as applied to claim 11 above and further in view of Lewis, US Patent 5,875,248.

9. As per claim 12, Geronimi-Yu discloses the claimed limitations as described above (see claim 11). Yu further discloses the ciphering of random numbers using a key stored in the integrated circuit via said ciphering algorithm to obtain another password (see for example; password is changed col 2 In 114). By the synchronization scheme of Yu, one of ordinary skill in the art at the time of the applicant's invention would have recognized the further generation of passwords in the tester using a key (see for example; col 8 In 1-8). The Geronimi-Yu combination does not explicitly teach authorizing the ciphering of said second password via said tester only if there is a match between said third and fourth passwords. Lewis further discloses a means of authentication between an integrated circuit and a communication device (see for example; abstract and col 3 In 1-14) wherein a device receives a third password (PIN) and comparing said third and fourth passwords (see for example; col 9 In 19-22) and authorizing the ciphering of a second password if there is a match between said third and fourth passwords (col 9 In 19-46). Both Lewis and the Geronimi-Yu combination disclose a means of authentication between an integrated circuit and a second device for accessing a part of the integrated circuit. By providing an extra layer of authentication before ciphering of the second password, access security is further increased (see for example; Lewis col 5 In 61-col 6 In 4). Lewis further discloses that the PIN is created based on a unique identifier (see for example; col 8 In 1-15).

One of ordinary skill in the art at the time of the applicant's invention would have realized the generation of third and fourth passwords based on the password generation means of Geronimi-Yu and further applying the comparison between the passwords by the comparison means of Lewis in implementing such a combination .It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Lewis within the Geronimi-Yu combination because it would have provided an extra layer of security due to another variable in authenticating between two devices.

10. As per claim 13, Geronimi-Yu discloses the claimed limitations as described above (see claim 11). Yu further discloses the ciphering of random numbers using a key stored in the integrated circuit via said ciphering algorithm to obtain another password (see for example; password is changed col 2 ln 1-14). By the synchronization scheme of Yu, one of ordinary skill in the art at the time of the applicant's invention would have recognized the further generation of passwords in the tester using a key (see for example; col 8 ln 1-8). The Geronimi-Yu combination does not explicitly teach authorizing the ciphering of said second password via said tester only if there is a match between said third and fourth passwords. Lewis further discloses a means of authentication between an integrated circuit and a communication device (see for example; abstract and col 3 ln 1-14) wherein a device receives a third password (PIN) and performing the reverse ciphering of said third password received, using key stored in the tester (smart chip) via said ciphering algorithm to find a PIN (see for example; col 8 ln 16-37) and authorizing the ciphering of a second password if there is a match between said the PIN stored and a calculated PIN (col 8 ln 16-37). Both Lewis and the Geronimi-Yu combination disclose a means of authentication between an integrated circuit and a second device for accessing a part of the integrated circuit. By providing an extra layer of authentication before ciphering of the

second password, access security is further increased (see for example; Lewis col 5 In 61-col 6 In 4). One of ordinary skill in the art at the time of the applicant's invention would have realized the generation of third password based on the password generation means of Geronimi-Yu and further applying the comparison between the random numbers by the comparison means of Lewis in implementing such a combination. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Lewis within the Geronimi-Yu combination because it would have provided an extra layer of security due to another variable in authenticating between two devices.

Response to Arguments

11. Applicant's arguments with respect to claims 11-13 have been fully considered but they are not persuasive. Applicant argues that the cited arts failed to teach a method of testing an integrated circuit as claimed in the present invention and they are not intended to execute a test of an integrated circuit. Examiner respectfully disagrees.

The examiner interprets the claim language in its broadest and reasonable meaning in view of the specification. Therefore, the examiner asserts that Geronimi and Yu teach the claimed limitations as recited in the claims. The examiner would point out that Geronimi teaches a tester for an integrated circuit containing hardware and/or software parts having a confidential nature (see for example, col 2 In 6062; a tester be present to run such testing of the integrated circuit) wherein the tester comprises: means of sending (routing) a calculated parameter to an integrated circuit (see for example; col 4 In 34-55).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

February 20, 2005

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100